

REMARKS

Claims 1-19 remain in this application. Claims 15-19 are allowed. Claims 1-14 are rejected. Claims 1-4 and 6-14 are amended herein to clarify the invention, to broaden language as deemed appropriate and to address matters of form unrelated to substantive patentability issues.

Applicants herein traverse and respectfully request reconsideration of the rejection of the claims cited in the above-referenced Office Action.

Claims 1-14 are rejected as obvious over Kamakura et al.(US 5,755,877) in view of Koppel (US 5,619,548) under 35 U.S.C. §103(a). The applicants herein respectfully traverse this rejection. For a rejection under 35 U.S.C. §103(a) to be sustained, the differences between the features of the combined references and the present invention must be obvious to one skilled in the art.

It is respectfully submitted that a *prima facie* case of obviousness could not be properly established in the rejection of claims 1-14. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed

combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." MPEP §706.02(j) "Contents of a 35 U.S.C. §103 Rejection".

Each of the independent claims 1, 6 and 10 contains a recitation directed to the provision of a sample substrate used in conjunction with the actual, at least one, substrate to be manufactured, and on which thin film(s) are to be deposited. In accordance with these claims, it is the thin film deposited on the sample substrate which is measured by the impinging X-rays, and used as a reference to determine progress of thickness of the corresponding thin film layer deposited simultaneously on the actual substrates being manufactured. By so measuring a sample substrate, on which a single layer is, for example, deposited, rather than measuring the layer deposited on the actual substrate itself, it is possible, if so desired, to deposit multiple layers on the actual substrate, with thickness of deposition of each of the layers being accurately controlled by reference to the particular single layer deposited on a sample substrate and measured by the impinging X-rays.

It is respectfully submitted that the combination of references fails to provide such claimed structural configuration and the attendant advantages obtained by utilization of same. As such, the proffered combination fails to provide all claimed elements as properly required for establishing a *prima facie* case of obviousness.

Claim 10 additionally recites structure directed to “a measuring unit provided at a prescribed site communicating with the thin film deposition furnace, and being capable of disposing an other thin film deposition substrate that serves as a thin film deposition sample substrate as a measuring object at a position for allowing the thin film deposition particles of the thin film substance flowing in from the thin film deposition furnace to adhere on the sample substrate.” It is respectfully submitted that no structure equivalent to the claimed “measuring unit” which is communicative with the film deposition furnace, and as exemplified by the structure identified by reference numeral 30 in Fig. 1, is taught by either of Kamakura et al. or Koppel.

Thus, it is respectfully submitted that rejected claims 1, 6 and 10 are not obvious in view of the cited references for the reasons stated above. Claims 2-5, 7-9 and 11-14, which depend respectively from claims 1, 6 and 10, derive patentability at least in part therefrom, as well as for the additional recitations they contain. Reconsideration of the rejections of claims 1-14 and their allowance are respectfully requested.

Claim 11 is rejected under 35 U.S.C. §103(a) as obvious over the Kamakura et al. reference (US 5,755,877) in view of the Koppel reference (US 5,619,548), and further in view of Ramani et al. (US 5,895,622).

It is respectfully submitted that Ramani et al. fails to provide what is missing from both Kamakura et al. and Koppel, as discussed above with regard to claim 10, from which claim 11 depends. Therefore the combination of references fails to teach

or suggest all claimed elements. Therefore, reconsideration of the rejection of claim 11 and its allowance are respectfully requested.

Applicants respectfully request a three (3) month extension of time for responding to the Office Action. Please charge the fee of \$950 for the extension of time to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited. Please charge any deficiency or credit any overpayment to Deposit Account No. 10-1250.

Respectfully submitted,
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